## **IMPORTANT**

You must acknowledge this amendment when you submit your quotation. Failure to acknowledge this amendment may constitute grounds for rejection of your quotation. If you submit your quote prior to the receipt of this amendment, acknowledgment may be made by telegram. You should state in the telegram whether the price contained in your sealed quotation is unchanged, decreased by an amount, or increased by an amount. We must receive all acknowledgments prior to the time set for receipt of quotations. Acceptance of late acknowledgments is subject to the provisions of the Federal Acquisition Regulation.

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES
			DUDOULGE DEC. NO.	1 1
2. AMENDMENT/ <del>MODIFICATION</del> NO.	3. EFFECTIVE DATE	4. REQUISITION	PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
0002	See block 16C		WR# 74901	
6. ISSUED BY COD	N62836	7. ADMINISTRA	ATED BY (If other than Item	n 6) CODE
OFFICER IN CHARGE OF CONTRACTS				
PACIFIC DIVISION, NAVAL FACILITIES	. FARM			
ENGINEERING COMMAND DETACHMENT, FA	CEASI			
PSC 473 BOX 61 FPO AP 96349-2903 (02SN NAGATA)				
8. NAME AND ADDRESS OF CONTRACTOR	(No., street, county, State and ZIP Co.	de)	9A. AMENDMENT	OF SOLICITATION NO.
U. TATALLE TARBUTANE OF CONTROL OF	(1.0.) 20.000, 00.000, 20.000	,		
			x N62836-01	-Q-0757
			9B. DATED (SEE IT	EM 11)
			28-Jun-01	
			10A. MODIFICATION	ON OF CONTRACT/ORDER NO.
			10B. DATED (SEE IT	EM 13)
CODE	FACILITY CODE		]	
11. THIS ITE	M ONLY APPLIES TO AMENDMEN	NTS OF SOLICITATIONS		
X The above numbered solicitation is amended as set forth	in Item 14. The hour and date specifi	ied for receipt of Offers	X	is extended is not extended.
Offers must acknowledge receipt of this amendment prior to	he hour and date specified in the solic	itation or as amended, by or	e of the following methods:	<u> </u>
(a) By completing Items 8 and 15, and returning copsubmitted; or (c) By separate letter or telegram which include	ries of the amendment; (b) By acknow	ledging receipt of this amen	dment on each copy of the offe	3) SCIMENT
TO BE RECEIVED AT THE PLACE DESIGNATED FOR T	THE RECEIPT OF OFFERS PRIOR T	TO THE HOUR AND DATE	E SPECIFIED MAY RESULT	IN REJECTION O
YOU OFFER. If by virtue of this amendment you desire to o	hange an offer slready submitted, such	change may be made by tel	legram or letter, provided each	
telegram or letter makes reference to the solicitation and this	amendment, and is received prior to th	e opening hour and date spe	cified.	
12. ACCOUNTING AND APPROPRIATION DATA (If req	uired)			
13. THIS ITEM APPLIES ONL	Y TO MODIFICATION OF CONT	RACTS <del>ORDERS</del>		
•	ACT/ORDER NO: AS DESCRIBE			
(x) A. THIS CHANGE ORDER IS ISSUED PURSUA	NT TO: (Specify authority)	THE CHANGES S	SET FORTH IN ITEM 14 AR	E MADE IN THE CONTRACT
ORDER NO. IN ITEM 10A.	.,			
B. THE ABOVE NUMBERED CONTRACT/ORD	ER IS MODIFIED TO REFLECT TH	E ADMINISTRATIVE CH	ANGES (such	as changes in paying office,
appropriation data,etc) SET FORTH IN I	EM 14, PURSUANT TO AUTHORE	TY OF FAR 43.103(b).		
C. THIS SUPPLEMENTAL AGREEMENT IS EN	TERED INTO PURSUANT TO AUTI	HORITY OF:		
D. OTHER (Specify type of modification and a	thority)			
E. IMPORTANT: Contractor	is not, is requ	ired to sign this documen	t and return	copies to the issuing office.
14. DESCRIPTION OF AMENDMENTAMODIFICATION			luding solicitation/contract su	
2250	(9	,	<b></b>	<b>,</b>
SUBJECT: REPLACE DAMAGED PAR'	TS OF MAIN ASH CONVEYO	R, # 1829		
a. The attached Scope of Work (SOW)	dated 31 May 01 pages 3 6	3 10 15 16 17 ΔND	18 are replaced	
		1, 10, 10, 10, 17 AND	10 are replaced	
in their entirety and are hereby incorpo	ated into the RFQ.			
			4 (40 00)	
b. The closing date and time are exte	ended from 11 July 2001 (1	0:30) to 13 July 200	1 (10:30).	
Except as provided herein, all terms and conditions	of the document referenced in	Item 9A or 10A, as here	etofore changed, remains	unchanged
and in full force and effect.			_	
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND	TITLE OF CONTRACTING	OFFICER (Type or print)
		TONY E	GIDI Contracting	Officer
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED		ATES OF AMERICA	16C. DATE SIGNED
		BY	anature of Continues Off	9-Jul-01
(Signature of person authorized to sign)			gnature of Contracting Officer	
NSN 7540-01-152-8070		30-105	STANDARD FORM	30 (REV. 10-83)

RFQ N62836-01-Q-0757

WO NO. 172839 PWC CODE 400 DATE: 31 May 01

# STATEMENT OF WORKS FOR "REPLACE DAMAGED PARTS OF MAIN ASH CONVEYOR, 1829"

1. GENERAL: Unless otherwise specified hereinafter, the Contractor shall furnish all labor, material, equipment, transportation and supervision necessary to replace damaged parts of main ash conveyor as shown on the attached sketches, Sketch Nos. 01-0711L through 01-0717L and specifications. The Contractor shall provide and secure this construction, complete and ready for use.

#### SECTION NO.

#### SECTION TITLE

13285

Removal and Disposal of fly ash

- 2. LOCATION: The job site is located at Bldg. No. 1829 Incinerator Plant, of the U.S. Navy Public Works Center, Yokosuka, Japan. The exact location will be indicated by the Contracting Officer or representative.
- 3. TERM OF CONTRACT: The work shall be completed within 90 calendar days after the date of order. The on-site work shall be completed within 30 calendar days.
- 4. APPLICABLE PUBLICATIONS: Unless otherwise specified, all work shall conform to the standards described below:
  - a. Japanese Industrial Standards (JIS).
  - b. Safety and Health Requirements Manual, EM 385-1-1, U.S. Army Corps of Engineers.
  - c. Manufacturer's instruction and manual.
  - d. Department of Defense (DOD) Japan Environmental Governing Standards (JEGS).
  - e. Common Specification for Mechanical Work, supervised by the Ministry of Construction, Japan ("Kikai-setsubi-kooji Kyootsu Shiyoosho")

The performance standards not specified herein shall be subject to approval of the Contracting Officer.

5. SCOPE OF WORK: The Contractor shall verify all dimensions and existing conditions before commencement of work. The Contractor shall conduct the following works:

#### a. Mechanical:

- (1) Disassemble and clean ash conveyor.
- (2) Replace parts listed below and any other consumable parts of main ash conveyor with new ones.
  - (a) Head Sprocket ----- 2 set/conveyor
  - (b) Driving Shaft ----- 1 set/conveyor
  - (c) Covered Pillow Block ----- 2 ea/conveyor (driving portion)
  - (d) Shear Pin Sprocket ----- 1 set/conveyor (includes 21 ea Shear Pins)
  - (e) Motor side Sprocket ----- 1 set/conveyor and Spacer
  - (f) Transmission Roller Chain ----- 1 lot/conveyor
  - (g) Base of Limit Switch ----- 1 set/conveyor
  - (h) Tail Sprocket (Take-up portion) 1 sets/conveyor
  - (i) Tail Sprocket (Take-up portion) 1 sets/conveyor (bush type)
  - (j) Bush (Take-up portion) ----- 1 ea/conveyor
  - (k) Tail Shaft (Take-up portion) ---- 1 set/conveyor

  - (m) Take-up Frame ----- 2 ea/conveyor
  - (n) Tail Sprocket (bend portion) ---- 1 sets/conveyor
  - (o) Tail Sprocket (bend portion) ---- 1 sets/conveyor (bush type)
  - (p) Bush (bend portion) ----- 1 ea/conveyor

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- (q) Shaft (bend portion) ----- 1 set/conveyor
- (s) Tail Sprocket (submarine) ----- 2 sets/conveyor
- (t) Bush (submarine) ----- 2 ea/conveyor
- (u) Tail Shaft with Collar ----- 1 set/conveyor and grease up fittings (submarine)
- (v) Covered Bearing (submarine) ---- 2 sets/conveyor
- (w) Conveyor Chain ----- 718 links/conveyor (includes 14 links spares)
- (x) Flight ----- 51 sets/conveyor (includes 9 sets spares)
- (y) Scum Flight ----- 2 sets/conveyor
- (z) Flight Pin ------ 106 ea/conveyor (includes 18 ea spares)
- (3) Reassemble and test operation for ash conveyor.
- Note: 1) Fly ash shall be disposed to plant ash bunker.
  - 2) Contaminated water shall be disposed to plant conveyor pit.
- 6. APPLICABLE EQUIPMENT: The conveyor of which parts to be replaced is as follows.
  - a. Main Ash Conveyor (carry ash out):

Type: Wet Type Flight Conveyor

Trough Width: 800 mm

Return Type: Upper Return

Capacity: 4 tons/h

Motor: AC 400 volts, 50 Hz, 2.2 kW Output Torque Rating: 1,000 kgf m Manufacturer: Takuma Co., Ltd.

- 7. SUBMITTALS: Submit the following items for approval;
  - a. Construction Schedule: The construction schedule shall be written with computer or type-writer. Hand-written construction

schedule will not be accepted. The construction schedule shall indicate at least the following information.

- (1) Times for starting and completion of installation, and testing and inspection.
- (2) Critical features of work with start and completion dates.
- (3) Bar chart showing the duration of critical features of work.
- (4) Preparatory phase meeting for each phase of work with the Contracting Officer representative.
- (5) Type of work that will be performed and the person who will be in charge of the work at the site. Include a statement showing the benefit to the Government for approving the overtime request.
- (6) Indicate numbers for each work.
- b. List of Employees including sub-contractors, and CQC personal name and his/her background.
- c. Vehicle list.
- d. Safety/hazard analysis plan, according to Safety and Health Requirements Manual, EM 385-1-1.
- e. Hazardous material (HM) inventory and material safety data sheets (MSDSs)
- f. List and Photos of replacement parts.
- 8. MATERIALS: Unless otherwise indicated, all Contractor furnished materials and parts shall be new. The materials and parts shall conform to the manufacturer's specification. The material not specified herein shall conform to Japanese Industrial Standards (JIS) or be subject to approval of the Contracting Officer.
- 8.1 Regulatory Requirements for Materials: Paints and primers which contain lead over 0.06 percent by weight of nonvolatile content, or zinc-chromate or strontium-chromate shall not be used. Materials shall not contain asbestos. Materials shall not contain PCB.
- 8.2 Hazardous Materials: The Contractor shall provide the Contracting Officer a hazardous material (HM) inventory and material safety data sheets (MSDSs) before such HM comes on to the job sites. The Contractor shall submit contractor plans for protection of public

and Navy personnel, HM disposal, and procedures for HM spill response in conformance with Federal and local regulations.

- 9. WORK SCHEDULE: The work shall be performed during regular working hours from 0800 to 1645, Monday through Friday except U.S. Government holidays. The work which require outage of incinerator operation shall be performed continuously during hours from 0800 to 1645 on Saturday and Sunday. The Contractor shall arrange his work so as not to cause interference with normal occurrence of the Government business. Within seven calendar days after the date of order, the Contractor shall submit a firm fixed written work schedule to the Contracting Officer for approval. In no event shall the Contractor change approved work schedule without prior written approval of the Contracting Officer.
  - a. If the Contractor desires to work outside of the normal Contractor's working hours, a written request must be submitted to the Contracting Officer for review and approval and shall indicate that such performance will be done at no additional cost to the Government. Submit the written request 96 hours in advance of the outside working hours. All work outside of regular hours must be able to demonstrate a benefit to the Government.
- 10. OUTAGE OF INCINERATOR OPERATION: The Government will be able to stop incinerator operation for only three consecutive days for this work. This outage shall be scheduled includes Saturday and Sunday.
- 11. PRE-PERFORMANCE CONFERENCE: Prior to commencing work, the Contractor shall meet in conference with the Contracting Officer, at a time to be determined by the Contracting Officer, to discuss and develop mutual understandings relative to scheduling and administering the work. The Contractor shall submit a written request of the preperformance conference within 15 calendar days after the award.
- 12. ACTIVITY REGULATIONS: Obey activity regulations, including fire, traffic, safety, energy conservation, security, and environmental regulations. Personnel employed at the activity shall keep within the limits of the work (and avenues of ingress and egress) and shall not enter any restricted areas unless required to do so and are cleared for such entry. Wear hard hats, with the Contractor's name prominently displayed, in designated hard hat areas. The Contractor's equipment shall be conspicuously marked for identification. Working hours for the Contractor's works shall conform to the paragraph "Work Schedule" of this specification.
- 13. EXAMINATION OF PREMISES: Offerors or quoters are expected to satisfy themselves as to the general and local conditions that may

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affect the cost of the performance of the work to the extent that such information is reasonably obtainable. It is considered impractical to determine, without inspection, the exact nature of the work and site conditions under which the work is to be performed. The Government will arrange the site visit for the offerors or quoters, and give the notice to them.

- 14. EXISTING WORK: Protect existing work which is to remain in place, be reused, or remain the property of the Government. Repair items which are to remain, and which are damaged during performance of the work to their original condition, or replace with new. Do not overload structural elements. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement must have Contracting Officer approval. All work of this nature shall be performed at the Contractor's expense and shall be performed as directed by the Contracting Officer. At the completion of all operations, existing work shall be in a condition equal to or better than that which existed before the work started.
- 15. TEMPORARY WORK: Unless otherwise indicated, all existing objects which interfere with new work shall temporarily be removed and reinstalled upon completion of new work.
- 16. INSTALLATION AND TEST: Equipment installation and test shall be conducted in accordance with the manufacturer's instruction manuals.
- 17. DISPOSAL: Unless otherwise specified, all debris and rubbish resulting from the work under this contract shall be disposed of by the Contractor at his expense off U.S. Government property and at approved facilities for such disposal in accordance with Japanese Law and local regulations.
  - a. Dispose of any hazardous waste and industrial waste in accordance with Department of Defense (DOD) Japan Environmental Governing Standards (JEGS), Japanese Laws, "Kanagawa-ken Kohgai Bohshi Jyorei Kitei Shu (Heisei 4 nendo)" (Handbook for Pollution Control Laws and Official Regulations), and Occupational Safety and Health Administration, U.S. Army Corps of Engineering (COE) Engineering Pamphlet. Proof of proper disposition (an authenticated disposal ticket or a copy of manifest) must be submitted to the Contracting Officer prior to Government acceptance of the work.
- 18. SAFETY REQUIREMENTS: The Contractor shall provide adequate protection to persons and property and conduct work in such a manner as to prevent spread of waste and splashings. All spillage of wastes

in the course of the handling operation shall be immediately cleaned up by the Contractor at no additional cost to the Government. All work shall be conducted in a safe manner and shall comply with the current safety requirements as indicated in EM385-1-1, Safety and Health Requirements Manual issued by the U.S. Army Corps of Engineers. The safety plan including accident prevention and hazard analysis plan shall be submitted and approved before any work commences at the site.

- 19. FIRE PROTECTION: The Contractor shall not be permitted to use heat or spark producing equipment and tools and heated products within hazardous area, except approved by the Contracting Officer. The Contractor shall submit the fire protection plan for approval of such work as required. The Contractor shall be fully responsible to prevent life and fire hazards. No smoking is allowed except in designated area.
- 20. ADMINISTRATION: The Contractor shall complete and forward to ROICC a Contractors Production Report for each day of site work by 10:00 AM the following day.
  - a. The Contractor shall provide a site superintendent which will be at the job site at all times while work is being conducted

END OF STATEMENT OF WORK

#### SECTION 13285

#### REMOVAL AND DISPOSAL OF FLY ASH

#### PART 1 GENERAL

- 1.1 REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
  - 1.1.1 American National Standards Institute (ANSI):

ANSI Z9.2 (1979; R 1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems

1.1.2 American Society for Testing and Materials (ASTM):

ASTM C 732 (1982; R 1987) Aging Effects of Artificial Weathering on Latex Sealants ASTM D 1331 (1989) Surface and Interfacial Tension of

Solutions of Surface-Active Agents

ASTM E 84 (1994) Surface Burning Characteristics of Building Materials

ASTM E 96 (1994) Water Vapor Transmission of Materials

1.1.3 Code of Federal Regulations (CFR):

29 CFR 1910.134 Respiratory Protection

29 CFR 1926.51 Sanitation

29 CFR 1926.59 Hazard Communication

1.1.4 Underwriters Laboratories Inc. (UL):

UL 586 (1990) High-Efficiency, Particulate, Air Filter Units

1.1.5 Department of Defense (DOD), Japan Environmental Governing Standards (JEGS), by US Forces Japan, 13 February 1997.

#### 1.2 DEFINITIONS:

- 1.2.1 Fly Ash: Ash in existing ash conveyors.
- 1.2.2 Amended Water: Water containing a wetting agent or surfactant with a maximum surface tension of 2.9 Pa (29 dynes per square centimeter) when tested in accordance with ASTM D 1331.
- 1.2.3 Fly Ash Control Area: That area where fly ash removal operations are performed which is isolated by physical boundaries which assist in the prevention of the uncontrolled release of fly ash dust or debris.
- 1.2.4 Contractor: The Contractor is that individual, or entity under contract to the Navy to perform the herein listed work.
- 1.2.5 HEPA Filter Equipment: High efficiency particulate air (HEPA) filtered vacuum and/or exhaust ventilation equipment with a filter system capable of collecting and retaining fly ash. Filters shall retain 99.97 percent of particles 0.3 microns or larger as indicated in UL 586.
- 1.2.6 Navy Consultant (NC): That qualified person employed directly by the Government to monitor, sample, inspect the work or in some other way advise the Contracting Officer. The NC is normally a private consultant, but can be an employee of the Government.
- 1.2.7 Enclosure: That engineering control technique described as a negative pressure enclosure in 29 CFR 1926.1101.
- 1.2.8 Private Qualified Person (PQP): That qualified person hired by the Contractor to perform the herein listed tasks.
- 1.2.9 Qualified Person (QP): The QP shall be certified by the local authorities shall have the license "Dai 1-shu Sagyo Kankyo Sokutei Shi" qualified by the Ministry of Labor, Japan.
- 1.2.10 Wetting Agent: A chemical added to water to reduce the water's surface tension thereby increasing the water's ability to soak into the material to which it is applied. An equivalent wetting agent must have a surface tension of at most 2.9 Pa (29)

dynes per square centimeter) when tested in accordance with ASTM D 1331.

#### 1.3 REQUIREMENTS:

- 1.3.1 Description of Work: The work covered by this section includes the handling and control of dioxin containing fly ash and describes some of the resultant procedures and equipment required to protect workers, the environment and occupants of the building or area, or both, from contact with airborne dioxin. The work also includes the disposal of any fly ash containing materials generated by the work. More specific operational procedures shall be outlined in the Fly Ash Abatement Plan called for elsewhere in this specification. The fly ash removal work includes the demolition and removal of fly ash in existing ash conveyor. Provide enclosure techniques as outlined in this specification. The Navy will evacuate the work area during the fly ash abatement work.
  - 1.3.2 Medical Requirements: Provide medical requirements including but not limited to medical surveillance and medical record keeping.
- 1.3.2.1 Medical Records: Maintain complete and accurate records of employees' medical examinations, medical records, and removal equipment record for a period of 50 years after termination of employment and make records of the required medical examinations and exposure data available for inspection and copying to: Authorized representatives of them, and an employee's physician upon the request of the employee or former employee.
- 1.3.3 Training: Train all personnel involved in the fly ash removal work. Furnish each employee with respirator training and fit testing administered by the PQP as required by 29 CFR 1910.134. Fully cover engineering and other hazard control techniques and procedures.
- 1.3.4 Permits, Licenses, and Notifications: Obtain necessary permits and licenses in conjunction with fly ash removal, hauling, and disposition, and furnish notification of such actions required by regional, GOJ, prefectural, and local authorities prior to the start of work. Notify the Contracting Officer in writing 10 working days prior to commencement of work in accordance with DOD JEGS.
- 1.3.5 Environment, Safety and Health Compliance: In addition to detailed requirements of this specification, comply with those

applicable laws, ordinances, criteria, rules, and regulations of regional, GOJ, prefectural, and local authorities regarding handling, storing, transporting, and disposing of fly ash materials. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this specification, applicable laws, rules, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirement as defined by the Government shall apply.

- 1.3.6 Respiratory Protection Program: Establish and implement a respirator program as required by 29 CFR 1910.134. Submit a written description of the program to the Contracting Officer.
- 1.3.7 Fly Ash Control Supervisor: The Contractor shall be represented on site by a supervisor, trained using the model Contractor accreditation plan as indicated in the Federal statutes for all portions of the herein listed work.
- 1.4 SUBMITTALS: Submit the following in accordance with Section 01330, "Submittal Procedures."
  - 1.4.1 SD-02, Manufacturer's Catalog Data:
    - a. Vacuums
    - b. Respirators
    - c. Pressure differential automatic recording instrument
    - d. Amended water
    - e. Material Safety Data Sheets (MSDS) for all materials proposed for transport to the project site
  - 1.4.2 SD-08, Statements:
    - a. Fly ash hazard abatement plan
    - b. Private qualified person documentation
    - c. Landfill approval
    - d. Employee training
    - e. Medical certification requirements

- f. Waste shipment records and if applicable exemption report
- g. Respiratory Protection Program
- h. Hazardous waste manifest
- 1.4.2.1 Fly Ash Abatement Plan: Submit a detailed plan of the safety precautions such as lockout, tagout, tryout, fall protection, and confined space entry procedures and equipment and work procedures to be used in the removal and demolition of fly The plan shall be prepared, signed, and sealed by the PQP. Such plan shall include but not be limited to the precise personal protective equipment to be used including, but not limited to, respiratory protection, type of whole-body protection, the location of fly ash control areas including clean and dirty areas, buffer zones, showers, storage areas, change rooms, removal method, interface of trades involved in the construction, sequencing of fly ash related work, disposal plan, type of wetting agent to be used, locations of local exhaust equipment, and a detailed description of the method to be employed in order to control environmental pollution. The plan shall also include (both fire and medical emergency) response plans. The Fly Ash Hazard Abatement Plan must be approved in writing prior to starting any fly ash removal work. Contractor, Fly Ash Control Supervisor, and PQP shall meet with the Contracting Officer prior to beginning work, to discuss in detail the Fly Ash Abatement Plan, including work procedures and safety precautions. Once approved by the Contracting Officer, the plan will be enforced as if an addition to the specification. Any changes required in the specification as a result of the plan shall be identified specifically in the plan to allow for free discussion and approval by the Contracting Officer prior to starting work.
- 1.4.2.2 Private Qualified Person Documentation: Submit the name, address, and telephone number of the Private Qualified Person (PQP) selected to prepare the Fly Ash Abatement Plan direct training.
- 1.4.2.3 Landfill Approval: Submit written evidence that the landfill for disposal is approved for fly ash disposal by the local and prefectural regulatory agency(s). Submit to the Contracting Officer, waste shipment records, prepared in accordance with DOD JEGS, signed and dated by an agent of the landfill, certifying the amount of asbestos materials delivered to the landfill, within 3 days after delivery. In those States

that require a hazardous waste manifest the Contractor shall submit, within 3 days, signed copies of such to the Contracting Officer.

- 1.4.2.4 Employee Training: Submit certificates signed by each employee indicating that the employee has received training in the proper handling of materials and wastes that contain dioxin; understands the health implications and risks involved, including the illnesses possible from exposure to airborne fly ash; understands the use and limits of the respiratory equipment to be used.
- 1.4.2.5 Medical Certification: Provide a written certification for each worker and supervisor, signed by a licensed physician indicating that the worker and supervisor has met or exceeded all of the medical prerequisites listed herein.
- 1.4.2.6 Respiratory Protection Program: Submit a written program manual or operating procedure including methods of compliance with regulatory statutes.
  - 1.4.3 SD-10, Field Test Reports:
    - a. Fly ash disposal quantity report
  - 1.4.4 SD-13, Certificates:
    - a. Vacuums
  - 1.4.5 SD-18, Records:
    - a. Notifications
    - b. Rental equipment
    - c. Respirator program records
    - d. Permits
- 1.4.5.1 Notifications: Notify the Contracting Officer and other appropriate Government agencies in writing 10 working days prior to the start of fly ash removal work as indicated in applicable laws, ordinances, criteria, rules, and regulations.
- 1.4.5.2 Rental Equipment: Provide a copy of the written notification to the rental company concerning the intended use of

the equipment and the possibility of fly ash contamination of the equipment.

- 1.4.5.3 Respirator Program Records: Submit records of the respirator program as required by 29 CFR 1910.134.
- 1.4.5.4 Protective Clothing Decontamination Quality Control Records: Provide all records that document quality control for the decontamination of reusable outer protective clothing.

#### PART 2 - PRODUCTS

2.1 ENCAPSULANTS: Shall conform to current USEPA requirements, shall contain no toxic or hazardous substances as defined in 29 CFR 1926.59, and shall conform to the following performance requirements.

#### 2.1.1 Removal Encapsulants:

Requirement	Test Standard
Flame Spread - 25, Smoke Emission - 50	ASTM E 84
Life Expectancy - 20 years Accelerated	ASTM C 732
11000101000	Aging Test
Permeability - Minimum 0.4 perms	ASTM E 96

#### PART 3 - EXECUTION

- 3.1 EQUIPMENT: At all times, provide the Contracting Officer or the Contracting Officer's Representative, with at least two complete sets of personal protective equipment as required for entry to and inspection of the fly ash control area. Provide equivalent training to the Contracting Officer or a designated representative as provided to Contractor employees in the use of the required personal protective equipment.
- 3.1.1 Respirators: Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH), or NIOSH/Mine Safety and Health Association (MSHA).

- 3.1.1.1 Respirators for Handling Fly Ash: Provide personnel engaged in pre-cleaning, cleanup, handling, removal and of fly ash with respiratory protection as indicated in 29 CFR 1910.134.
  - 3.1.2 Exterior Whole Body Protection:
- 3.1.2.1 Outer Protective Clothing: Provide personnel exposed to fly ash with disposable "non-breathable," whole body outer protective clothing, head coverings, gloves, and foot coverings. Provide disposable plastic or rubber gloves to protect hands. Cloth gloves may be worn inside the plastic or rubber gloves for comfort, but shall not be used alone. Make sleeves secure at the wrists, make foot coverings secure at the ankles, and make clothing secure at the neck by the use of tape.
- 3.1.2.2 Work Clothing: Provide cloth work clothes for wear under the outer protective clothing and foot coverings and either dispose of or properly decontaminate them as recommended by the PQP after each use.
- 3.1.2.3 Personal Decontamination Unit: Provide a temporary, enclosure unit with a separate decontamination locker room and clean locker room with an shower that complies with 29 CFR 1926.51(f)(4)(ii) through (V) in between for personnel required to wear whole body protective clothing. Provide two separate lockers for each fly ash worker, one in each locker room. street clothing and street shoes in the clean locker. vacuum and remove fly ash contaminated disposable protective clothing while still wearing respirators at the boundary of the fly ash work area and seal in impermeable bags or containers for disposal. Do not wear work clothing between home and work. Locate showers between the decontamination locker room and the clean locker room and require that all employees shower before changing into street clothes. Drain used shower water to conveyor water pit. Dispose of fly ash contaminated work clothing as a Hazardous Material. Decontamination units shall be physically attached to the fly ash control area. Build both a personnel decontamination unit and an equipment decontamination unit onto and integral with each fly ash control area.
- 3.1.2.4 Eye Protection: Provide goggles to personnel engaged in fly ash abatement operations when the use of a full face respirator is not required.
- 3.1.3 Warning Signs and Labels: Provide warning signs printed in English and Japanese at all approaches to fly ash control areas. Locate signs at such a distance that personnel may read

the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all fly ash, scrap, waste, debris, and other products contaminated with fly ash.

3.1.3.1 Warning Sign: Provide vertical format minimum 500 by 355 mm (20 by 14 inches) displaying the following legend in the lower panel:

Legend

Danger

25 mm (1-inch) Sans Serif Gothic or Block

Fly Ash

25 mm (1-inch) Sans Serif Gothic or Block

Authorized Personnel Only

6 mm (1/4-inch) Gothic

Respirators and Protective
Clothing are Required in this Area

Spacing between lines shall be at least equal to the height of the upper of any two lines.

- 3.1.4 Tools: Vacuums shall be leak proof to the filter and equipped with HEPA filters. Filters on vacuums shall conform to ANSI Z9.2 and UL 586. Remove all residual fly ash from reusable tools prior to storage or reuse.
- 3.1.5 Rental Equipment: If rental equipment is to be used, furnish written notification to the rental agency concerning the intended use of the equipment and the possibility of fly ash contamination of the equipment.
- 3.2 WORK PROCEDURE: Perform fly ash related work, DOD JEGS, and as specified herein. Use wet removal procedures techniques. Personnel shall wear and utilize protective clothing and equipment as specified herein. Eating, smoking, drinking, chewing gum, tobacco, or applying cosmetics shall not be permitted in the fly ash work or control areas. Personnel of other trades not engaged in the removal and demolition of fly ash shall not be exposed at any time to airborne concentrations of fly ash unless all the personnel protection and training provisions of this specification are complied with by the trade personnel. Shut down the building heating, ventilating, and air

conditioning system, cap the openings to the system, and provide temporary heating, and ventilation, and air conditioning prior to the commencement of fly ash related work.

- 3.2.1 Fly Ash Control Area Requirements: Fly ash control area is inside of 2-meter roped-off areas around existing ash conveyor.
- 3.2.1.1 Enclosure: Block and seal openings in areas where the release of airborne fly ash dust can be expected. Establish an enclosure with the use of curtains, portable partitions, or other enclosures in order to prevent the escape of fly ash dust from the contaminated work area. Enclosure development shall include protective covering of uncontaminated walls, and ceilings with a continuous membrane of two layers of minimum 0.15mm plastic sheet sealed with tape to prevent water or other damage. Provide two layers of 0.15mm plastic sheet over floors and extend a minimum of 300mm up walls. Seal all joints with tape. Provide enclosure in the fly ash control area. Openings will be allowed in enclosures of the fly ash control areas for personnel and equipment entry and exit, the supply and exhaust of air for the local exhaust system and the removal of properly containerized fly ash.
- 3.2.2 Removal Procedures: Wet fly ash with a fine spray of amended water during removal and other handling so as to reduce the emission of airborne ash. Remove remaining fly ash in ash conveyor. Lower and otherwise handle fly ash as a hazardous material indicated in DOD JEGS. The removed fly ash shall be disposed directly to ash bunker or double-bagged (one bag within another) in 0.15 mm (6-mil) plastic bags or wrapped doubly in 0.15 mm plastic sheets and sealed if fly ash is carried outside of fly ash control area.
- 3.2.3 Site Inspection: While performing fly ash removable work, the Contractor shall be subject to on-site inspection by the Contracting Officer who may be assisted by or represented by safety or industrial hygiene personnel. If the work is found to be in violation of this specification, the Contracting Officer or his representative will issue a stop work order to be in effect immediately and until the violation is resolved. All related costs including standby time required to resolve the violation shall be at the Contractor's expense.
  - 3.3 CLEAN-UP AND DISPOSAL:
- 3.3.1 Housekeeping: Essential parts of fly ash control are housekeeping and clean-up procedures. Maintain surfaces of the

fly ash control area free of accumulations of fly ash dust. Give meticulous attention to restricting the spread of dust and debris; keep waste from being distributed over the general area. Use HEPA filtered vacuum cleaners. When fly ash removal is complete, all fly ash waste is removed from the work-site, and final clean-up is completed, the Contracting Officer will attest that the area is safe before the signs can be removed. The Contracting Officer will visually inspect all surfaces within the enclosure for residual material or accumulated dust or debris. The Contractor shall re-clean all areas showing dust or residual materials. Submit to the Contracting Officer that the area is safe in writing before unrestricted entry will be permitted. The Government shall have the option to perform monitoring to determine if the areas are safe before entry is permitted.

3.3.2 Title to Materials: All waste materials, except as specified otherwise, shall become the property of the Contractor and shall be disposed of as specified in applicable local, State, and Federal regulations and herein.

### 3.3.3 Disposal of Fly Ash:

3.3.3.1 Procedure for Disposal: Collect fly ash contaminated waste, scrap, debris, bags, containers, equipment, and clothing which may produce airborne concentrations of fly ash and place in sealed fiber-proof, waterproof, non-returnable containers (e.g. double plastic bags 0.15 mm (6-mils) thick, and placed in cartons, drums or cans). Wastes within the containers must be adequately wet in accordance with DOD JEGS. The name of the waste generator and the location at which the waste was generated shall be clearly indicated on the outside of each container. Prevent contamination of the transport vehicle (especially if the transport vehicle is a rented truck likely to be used in nonhazardous materials transportation). These precautions include lining the vehicle cargo area with plastic sheeting (similar to work area enclosure) and thorough cleaning of the cargo area after transport and unloading of fly ash dust and debris is complete. Dispose of waste fly ash at a Government of Japan or local government approved fly ash landfill off Government property. For temporary storage, store sealed impermeable bags in waste drums or skids. An area for interim storage of fly ash waste-containing drums or skids will be assigned by the Contracting Officer or his authorized representative. for hauling and disposal shall comply with DOD JEGS, GOJ, and local standards. Sealed plastic bags may be dumped from drums into the burial site unless the bags have been broken or damaged. Damaged bags shall remain in the  $\bar{\text{d}}\text{rum}$  and the entire

contaminated drum shall be buried. Uncontaminated drums may be recycled. Workers unloading the sealed drums shall wear appropriate respirators and personal protective equipment when handling fly ash materials at the disposal site.

3.3.3.2 Fly Ash Disposal Quantity Report: Direct the PQP to record and report, to the Contracting Officer, the amount of fly ash removed and released for disposal. Deliver the report for the previous day at the beginning of each day shift with amounts of material removed during the previous day reported in Kilo Gram or cubic meters as described initially in this specification and in cubic meters for the amount of fly ash containing material released for disposal. Allow the NC to inspect, record and report the amount of fly ash containing material removed and released for disposal on a daily basis.

\*\*\* END OF SECTION \*\*\*